

Serial No. 10/715,127
Docket No. 031279
Page 2

IN THE CLAIMS:

The following listing of claims, in which claims 1 and 15 are amended and claim 22 is added, replaces all prior versions and listings of the claims in this application:

Listing of claims:

Claim 1 (Currently amended): A culture apparatus for culturing samples on containers inside a chamber adjusted to predetermined ambient conditions, ~~the culture apparatus being characterized in that~~ wherein a container transport device is disposed inside the chamber centrally thereof and comprises a transport table for placing the container thereon, and a drive mechanism for driving the transport table in the direction of X-axis and the direction of Y-axis which are orthogonal on a horizontal plane, and in the direction of Z-axis orthogonal to these directions, a container accommodating rack being disposed on each of opposite sides of the transport device, which sides are along the direction of X-axis, the accommodating rack having container accommodating portions in the direction of Y-axis and in the direction of Z-axis for accommodating therein respective containers, the container being movable into or out of the desired container accommodating portion of the desired rack by the transport device,

Serial No. 10/715,127
Docket No. 031279
Page 3

wherein the container accommodating rack comprises a plurality of stackers arranged in the direction of Y-axis, and each of the stackers comprises container accommodating portions repeatedly provided in the direction of Z-axis, the chamber has an opening facing toward the direction of Y-axis and a door for closing the opening, and the plurality of stackers constituting the accommodating rack ~~[[are]]~~ is mounted on a drawer installed on a base and slidable in the direction of Y-axis, the plurality of stackers being withdrawable through the opening along with the drawer, with the door opened, and

the chamber has a container inlet for transporting the container into the chamber therethrough, ~~the container inlet having a container into the chamber therethrough,~~ the container inlet having a carriage mechanism connected thereto, and the chamber has attached thereto a shutter mechanism for opening and closing the container inlet, and

the container carriage mechanism comprises a container carrier on which the container is mounted and moved in the direction of x-axis, the container carrier being formed with a pair of supports for supporting the container at the opposite sides in the direction of Y-axis, wherein the transport table can be moved to a position under the container supported by the supports, and the transport table can be raised between the supports, wherein the container is lifted from the container carrier by the transport table

Serial No. 10/715,127
Docket No. 031279
Page 4

raised from the position under the container supported by the supports of the container carrier.

Claim 2-14 (Cancelled)

Claim 15 (Currently amended): A culture apparatus for culturing samples on containers inside a chamber adjusted to predetermined ambient conditions, ~~the culture apparatus being characterized in that~~ wherein a container transport device is disposed inside the chamber centrally thereof and comprises a transport table for placing the container thereon, and a drive mechanism for driving the transport table in the direction of X-axis and the direction of Y-axis which are orthogonal on a horizontal plane, and in the direction of Z-axis orthogonal to these directions, a container accommodating rack being disposed on each of opposite sides of the transport device, which sides are along the direction of X-axis, the accommodating rack having container accommodating portions arranged in the direction of Y-axis and in the direction of Z-axis for accommodating therein respective containers, the container being movable into or out of the desired container accommodating portion of the desired rack by the transport device, wherein a plurality of different types of stackers can be arranged inside the chamber for accommodating containers therein, each of the stackers can be arranged inside the chamber for

Serial No. 10/715,127
Docket No. 031279
Page 5

accommodating containers therein, each of the containers being provided with identification information for identifying the container, wherein the chamber has a container inlet for placing the container into the chamber therethrough, and the container inlet has a container carriage mechanism connected thereto, the culture apparatus comprising:

storage means for storing therein stacker type information of each of the stackers that defines a container size accommodatable in the stacker, and the identification information provided on each of the containers, the information having registered therein the container size and a predetermined date and time;

information processing means for storing the stacker type information of each of the stackers and the identification information of each of the containers in the storage means[[]];

means for reading the identification information provided on each of the containers, the means being provided as ~~opposed to~~ opposite the container inlet[[]];

control means for comparing the size of a container to be accommodated, registered in the read identification information, with the container size accommodatable in the stacker, defined by the stacker type information stored in the storage means, to extract a

Serial No. 10/715,127
Docket No. 031279
Page 6

stacker capable of accommodating the container, and controlling the operation of the container transport device with reference to the stacker type information stored in the storage means and the read identification information, toward one container accommodating portion of the extrated stacker; and

an information display device[L]];

wherein the information processing means has a comparison and determination unit for comparing the date and time when the container is accommodated, added to the identification information of the container, with the predetermined date and time registered in the identification information of the container, and determining whether there is any container, the predetermined date and time of which has passed, and stores delivery management information for managing the time to deliver the container in the storage means using the determination result, the control means being operable to monitor the delivery time for the plurality of containers arranged inside the chamber based on the container arranged inside the chamber based on the container identification information and the delivery management information stored in the storage means and to give the information display device a command to display arrival of the delivery time upon the arrival of the time to deliver the container.

Serial No. 10/715,127
Docket No. 031279
Page 7

Claims 16-21 (Cancelled)

Claim 22 (New): The culture apparatus according to claim 1, wherein the transport table has a plurality of projections in the direction of Y-axis outwardly of the transport table, formed spacedly in the direction of X-axis on opposite sides in the direction of Y-axis, each of the projections being formed with a wall surface for holding the container between opposite wall surfaces to restrict movement of the container, and the pair of supports of the container carrier has a plurality of projections projecting in the direction of Y-axis inwardly of the container carrier, formed spacedly in the direction of X-axis, each of the projections being formed with a wall surface for holding the container between opposite wall surfaces to restrict movement of the container, the projections of the transport table and the projections of the container carrier being staggered so as not to interfere with each other when the transport table is raised between the supports of the container carrier.